

Figure 1

Figure 2 A

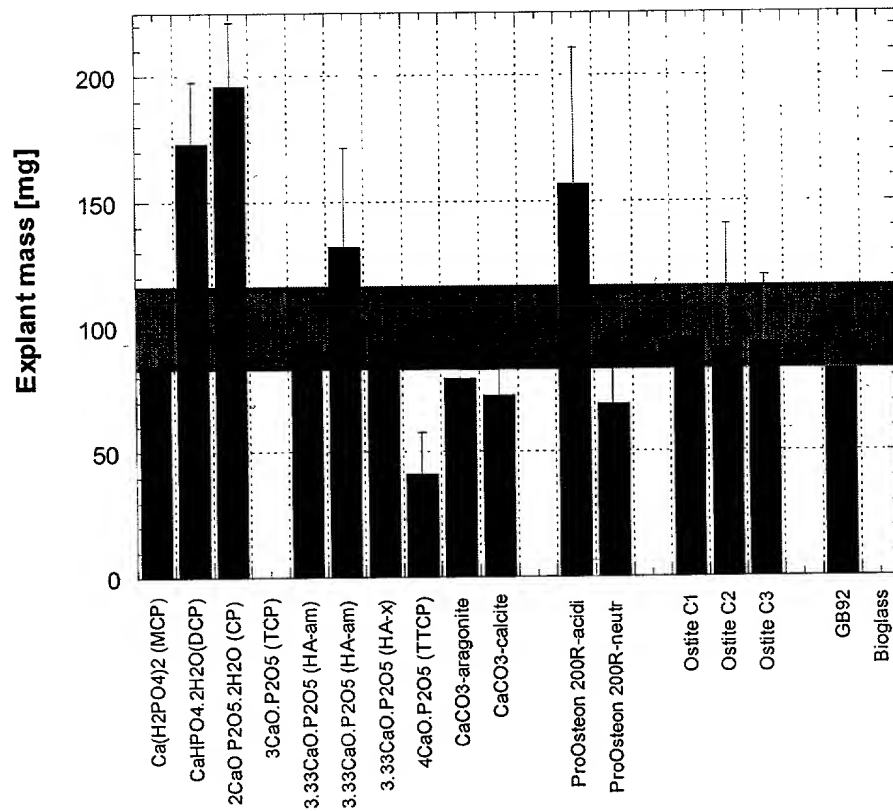


Figure 2 B

	Explant Mass				Explant Mass - <i>normalized</i>			
	CPB		CB		CPB		CB	
	avg	<i>±SD</i>	avg	<i>±SD</i>	avg	<i>±SD</i>	avg	<i>±SD</i>
Ca(H ₂ PO ₄) ₂ (MCP)	71.2	17.0	84.8	11.0	84.7	20.2	100.8	15.5
CaHPO ₄ .2H ₂ O(DCP)	157.2	22.4	91.6	10.6	173.0	24.7	100.8	15.5
2CaO.P ₂ O ₅ .2H ₂ O (CP)	191.8	24.6	98.6	13.7	196.1	25.2	100.8	15.5
3CaO.P ₂ O ₅ (TCP)								
3.33CaO.P ₂ O ₅ (HA-am)	134.8	15.2	144.8	29.8	93.9	10.6	100.8	15.5
3.33CaO.P ₂ O ₅ (HA-am)	136.2	39.9	103.8	13.4	132.3	38.8	100.8	15.5
3.33CaO.P ₂ O ₅ (HA-x)	109.0	18.1	116.2	8.6	94.6	15.7	100.8	15.5
4CaO.P ₂ O ₅ (TTCP)	46.8	18.8	115.0	5.9	41.0	16.5	100.8	15.5
CaCO ₃ -aragonite	96.6	41.0	123.2	15.1	79.1	33.6	100.8	15.5
CaCO ₃ -calcite	73.4	24.1	102.2	17.6	72.4	23.8	100.8	15.5
ProOsteon 200R-acidi	87.5	30.2	56.3	16.3	156.7	54.1	100.8	15.5
ProOsteon 200R-neutr	22.0	4.9	32.2	6.5	68.9	15.3	100.8	15.5
								0.0
Ostite C1	108.3	13.4	114.2	13.8	95.6	11.8	100.8	15.5
Ostite C2	101.6	55.0	112.2	22.8	91.3	49.4	100.8	15.5
Ostite C3	109.8	31.5	118.6	26.3	93.3	26.8	100.8	15.5
GB9N	80.8	10.8	98.6	13.4	82.6	11.0	100.8	15.5
Bioglass								

Figure 3 A

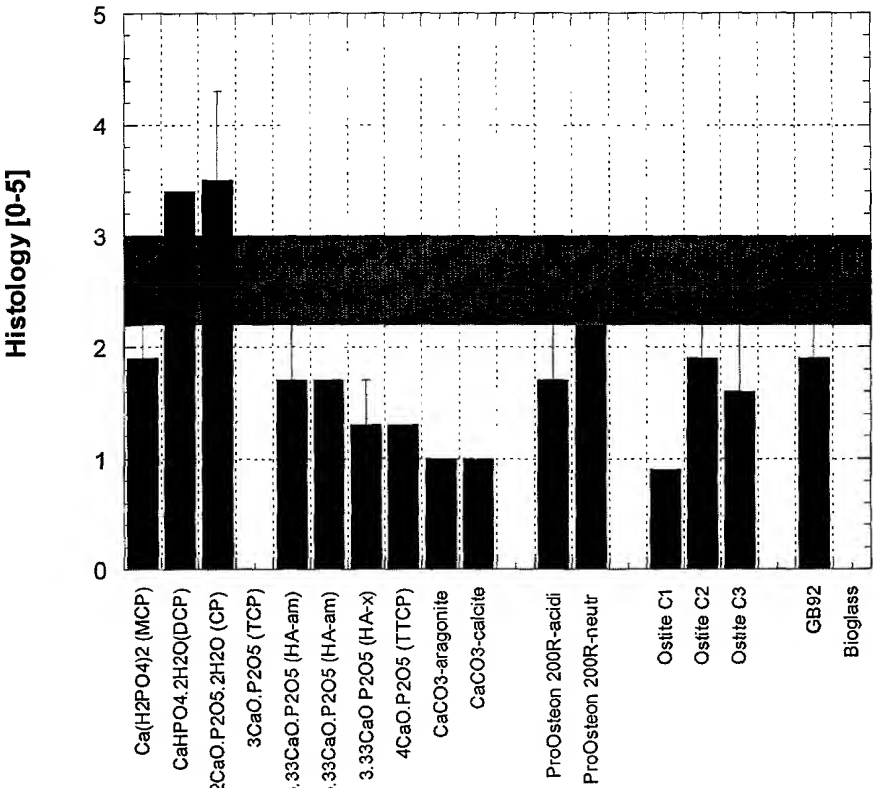


Figure 3 B

	Histology Score				Histology Score - normalized			
	CPB		CB		CPB		CB	
	avg	±SD	avg	±SD	avg	±SD	avg	±SD
Ca(H ₂ PO ₄) ₂ (MCP)	1.7	0.6	2.3	0.6	1.9	0.7	2.6	0.4
CaHPO ₄ .2H ₂ O(DCP)	3.0	0.0	2.3	0.6	3.4	0.0	2.6	0.4
2CaO.P ₂ O ₅ .2H ₂ O (CP)	2.7	0.6	2.0	0.0	3.5	0.8	2.6	0.4
3CaO.P ₂ O ₅ (TCP)								
3.33CaO.P ₂ O ₅ (HA-am)	1.3	0.6	2.0	0.0	1.7	0.8	2.6	0.4
3.33CaO.P ₂ O ₅ (HA-am)	2.0	0.0	3.0	0.0	1.7	0.0	2.6	0.4
3.33CaO.P ₂ O ₅ (HA-x)	1.2	0.4	2.4	0.5	1.3	0.4	2.6	0.4
4CaO.P ₂ O ₅ (TTCP)	1.0	0.0	2.0	0.0	1.3	0.0	2.6	0.4
CaCO ₃ -aragonite	1.0	0.0	2.7	0.6	1.0	0.0	2.6	0.4
CaCO ₃ -calcite	1.0	0.0	2.7	0.6	1.0	0.0	2.6	0.4
ProOsteon 200R-acidi	2.8	1.0	4.4	0.5	1.7	0.6	2.6	0.4
ProOsteon 200R-neutr	2.0	0.0	2.4	0.5	2.2	0.0	2.6	0.4
Ostite C1	1.0	0.0	3.0	0.0	0.9	0.0	2.6	0.4
Ostite C2	1.7	0.6	2.3	0.6	1.9	0.7	2.6	0.4
Ostite C3	1.7	1.2	2.7	0.6	1.6	1.2	2.6	0.4
GB9N	2.0	1.0	2.7	0.6	1.9	1.0	2.6	0.4
Bioglass								

Figure 4 A

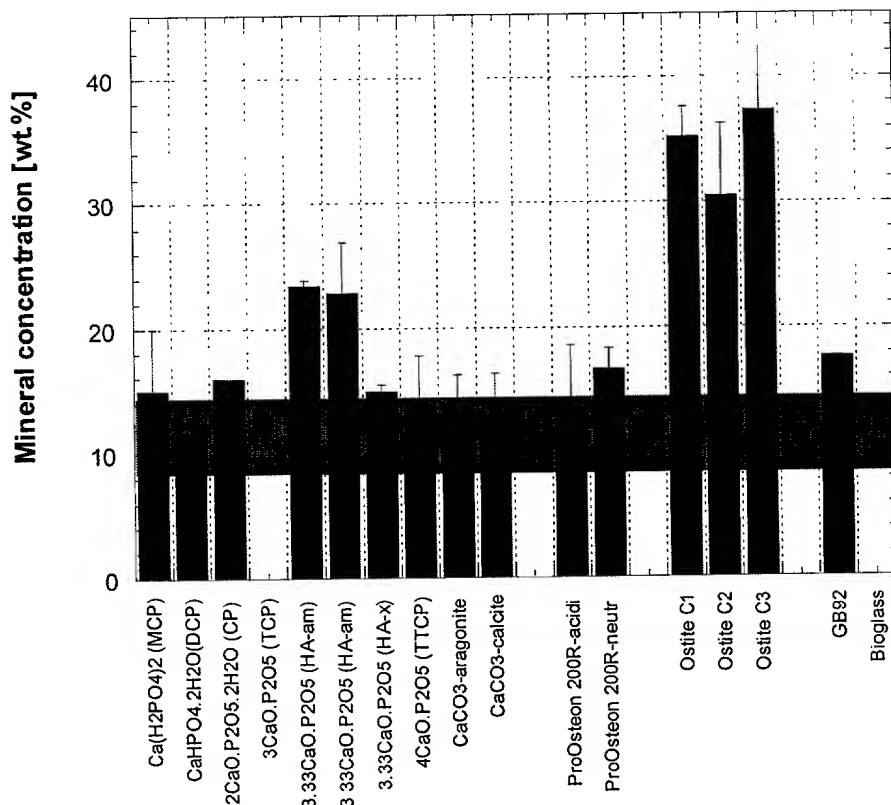


Figure 4 B

	Mineral Concentration				Mineral conc - normalized			
	CPB		CB		CPB		CB	
	avg	$\pm SD$	avg	$\pm SD$	avg	SD	avg	$\pm SD$
Ca(H ₂ PO ₄) ₂ (MCP)	12.3	4.1	8.8	1.9	15.0	5.0	10.7	1.4
CaHPO ₄ .2H ₂ O(DCP)	12.1	0.5	11.1	0.7	11.7	0.5	10.7	1.4
2CaO.P ₂ O ₅ .2H ₂ O (CP)	16.4	0.0	11.1	0.5	15.9	0.0	10.7	1.4
3CaO.P ₂ O ₅ (TCP)								
3.33CaO.P ₂ O ₅ (HA-am)	18.2	0.3	8.3	1.8	23.5	0.4	10.7	1.4
3.33CaO.P ₂ O ₅ (HA-am)	18.1	3.2	8.5	1.4	22.9	4.0	10.7	1.4
3.33CaO.P ₂ O ₅ (HA-x)	18.5	0.6	13.3	1.4	14.9	0.5	10.7	1.4
4CaO.P ₂ O ₅ (TTCP)	17.8	5.0	13.7	0.9	13.9	3.9	10.7	1.4
CaCO ₃ -aragonite	14.6	2.3	11.2	1.6	14.0	2.2	10.7	1.4
CaCO ₃ -calcite	12.2	3.0	10.0	1.6	13.1	3.2	10.7	1.4
ProOsteon 200R-acidi	19.3	7.2	15.3	4.2	13.5	5.1	10.7	1.4
ProOsteon 200R-neutr	25.4	2.8	16.4	3.2	16.6	1.8	10.7	1.4
Ostite C1	26.6	1.8	8.1	0.7	35.2	2.4	10.7	1.4
Ostite C2	23.6	4.5	8.3	0.5	30.5	5.8	10.7	1.4
Ostite C3	25.7	5.7	7.4	0.5	37.3	8.3	10.7	1.4
GB9N	15.6	0.1	9.5	0.8	17.6	0.1	10.7	1.4
Bioglass								

Figure 5 A

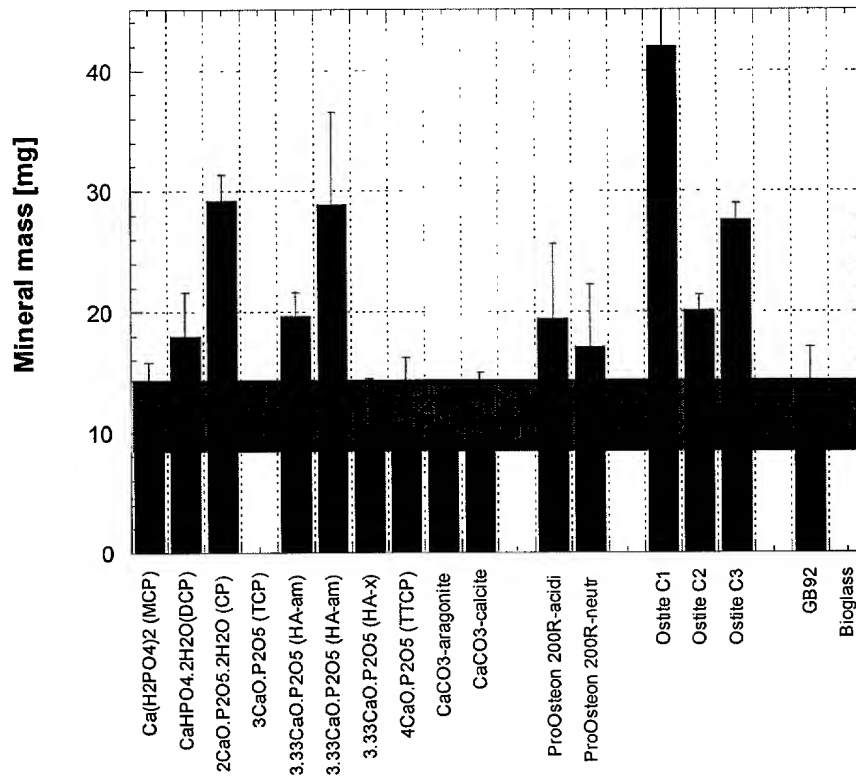


Figure 5 B

	Mineral Mass				Mineral Mass - normalized			
	CPB		CB		CPB		CB	
	avg	$\pm SD$	avg	$\pm SD$	avg	$\pm SD$	avg	$\pm SD$
Ca(H ₂ PO ₄) ₂ (MCP)	9.9	3.0	8.5	0.7	12.1	3.7	10.4	1.8
CaHPO ₄ .2H ₂ O(DCP)	18.2	3.6	10.5	2.2	18.0	3.6	10.4	1.8
2CaO.P ₂ O ₅ .2H ₂ O (CP)	33.3	2.4	11.8	0.8	29.2	2.1	10.4	1.8
3CaO.P ₂ O ₅ (TCP)								
3.33CaO.P ₂ O ₅ (HA-am)	26.8	2.8	14.2	5.1	19.6	2.0	10.4	1.8
3.33CaO.P ₂ O ₅ (HA-am)	26.8	7.0	9.6	1.9	28.9	7.6	10.4	1.8
3.33CaO.P ₂ O ₅ (HA-x)	16.7	6.4	16.4	0.3	10.5	4.0	10.4	1.8
4CaO.P ₂ O ₅ (TTCP)	14.3	7.8	14.1	1.6	10.5	5.7	10.4	1.8
CaCO ₃ -aragonite	13.2	4.3	14.5	2.7	9.4	3.1	10.4	1.8
CaCO ₃ -calcite	8.2	4.2	8.6	1.8	9.9	5.1	10.4	1.8
ProOsteon 200R-acidi	10.3	3.3	5.5	1.6	19.4	6.2	10.4	1.8
ProOsteon 200R-neutr	6.6	2.0	4.0	1.8	17.1	5.2	10.4	1.8
Ostite C1	34.5	5.7	8.5	1.3	42.0	6.9	10.4	1.8
Ostite C2	20.8	1.3	10.7	0.1	20.1	1.3	10.4	1.8
Ostite C3	25.8	1.3	9.7	1.6	27.6	1.4	10.4	1.8
GB9N	11.8	2.7	8.8	0.4	13.9	3.2	10.4	1.8
Bioglass								

Figure 6 A

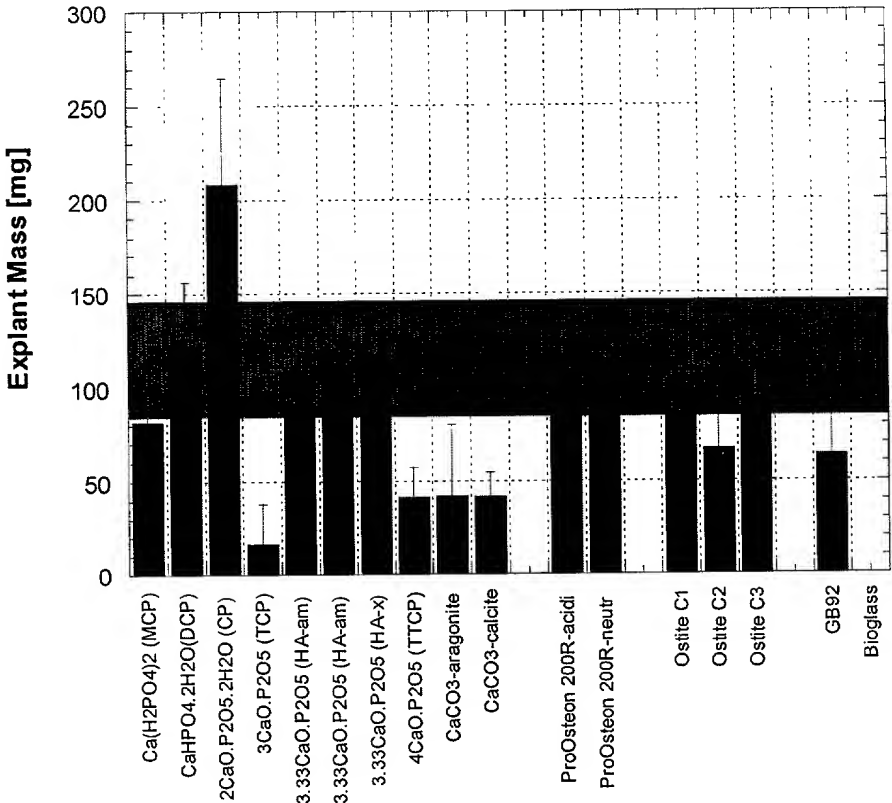


Figure 6 B

	Explant Mass				Explant Mass - normalized			
	CPB		CDB		CPB		CDB	
	avg	±SD	avg	±SD	avg	±SD	avg	±SD
Ca(H ₂ PO ₄) ₂ (MCP)	107.5	22.5	154.7	24.3	81.6	17.1	117.5	28.9
CaHPO ₄ .2H ₂ O(DCP)	78.9	21.6	75.5	16.9	122.7	33.6	117.5	28.9
2CaO.P ₂ O ₅ .2H ₂ O (CP)	98.9	27.0	55.8	36.1	208.2	56.8	117.5	28.9
3CaO.P ₂ O ₅ (TCP)	11.7	15.3	83.2	20.7	16.5	21.6	117.5	28.9
3.33CaO.P ₂ O ₅ (HA-am)	107.3	29.4	137.4	15.3	91.7	25.1	117.5	28.9
3.33CaO.P ₂ O ₅ (HA-am)	124.6	25.6	130.2	29.4	112.4	23.1	117.5	28.9
3.33CaO.P ₂ O ₅ (HA-x)	111.1	16.5	110.7	25.6	117.9	17.5	117.5	28.9
4CaO.P ₂ O ₅ (TTCP)	41.1	16.0	116.9	16.0	41.3	16.1	117.5	28.9
CaCO ₃ -aragonite	50.1	45.1	139.3	45.1	42.2	38.0	117.5	28.9
CaCO ₃ -calcite	68.0	21.0	191.0	21.0	41.8	12.9	117.5	28.9
ProOsteon 200R-acidi	74.7	13.6	80.4	29.1	109.1	21.4	117.5	28.9
ProOsteon 200R-neutr	29.2	6.0	35.5	12.7	96.6	24.1	117.5	28.9
Ostite C1	123.0	46.3	167.3	28.5	86.3	4.2	117.5	28.9
Ostite C2	82.9	21.2	146.3	28.6	66.6	37.2	117.5	28.9
Ostite C3	127.0	26.6	157.5	31.2	94.7	15.8	117.5	28.9
GB9N	52.8	20.5	97.5	22.6	63.6	24.7	117.5	28.9
Bioglass								0.0

Figure 7 A

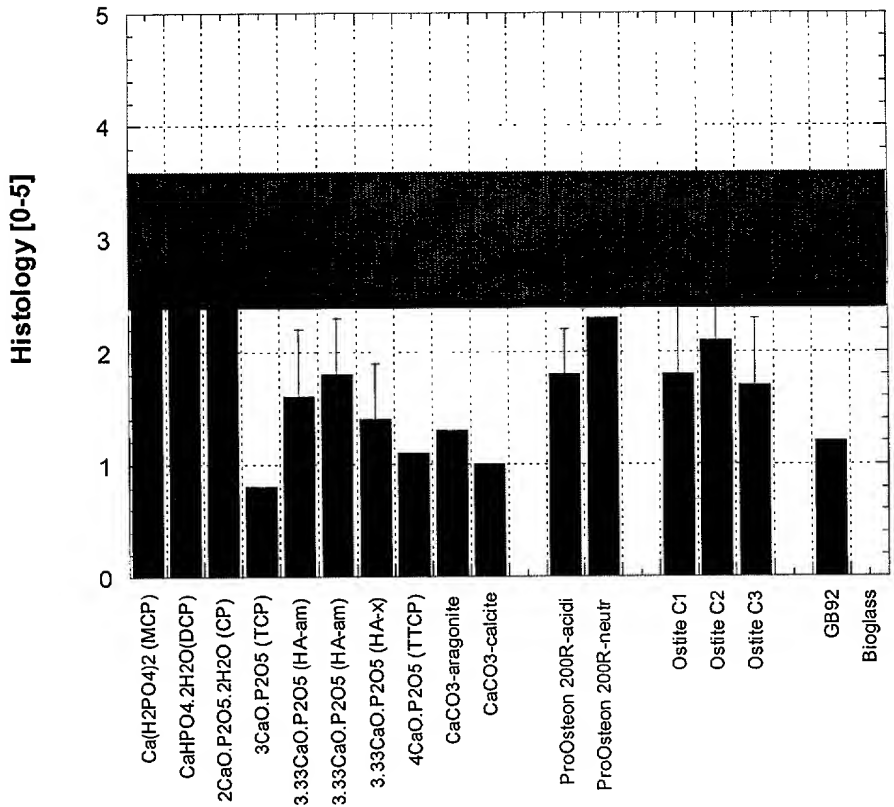


Figure 7 B

	Histology Score				Histology Score - normalized			
	CPB		CDB		CPB		CDB	
	avg	±SD	avg	±SD	avg	±SD	avg	±SD
Ca(H ₂ PO ₄) ₂ (MCP)	3.0	0.0	3.7	0.5	2.4	0.0	3.0	0.6
CaHPO ₄ .2H ₂ O(DCP)	4.0	0.6	3.8	0.6	3.1	0.5	3.0	0.6
2CaO.P ₂ O ₅ .2H ₂ O (CP)	2.3	0.8	2.8	1.3	2.4	0.8	3.0	0.6
3CaO.P ₂ O ₅ (TCP)	1.0	0.0	3.7	0.5	0.8	0.0	3.0	0.6
3.33CaO.P ₂ O ₅ (HA-am)	1.3	0.5	2.4	0.7	1.6	0.6	3.0	0.6
3.33CaO.P ₂ O ₅ (HA-am)	1.1	0.3	1.8	0.6	1.8	0.5	3.0	0.6
3.33CaO.P ₂ O ₅ (HA-x)	1.3	0.5	2.7	0.5	1.4	0.5	3.0	0.6
4CaO.P ₂ O ₅ (TTCP)	1.0	0.0	2.7	0.5	1.1	0.0	3.0	0.6
CaCO ₃ -aragonite	1.0	0.0	2.3	0.6	1.3	0.0	3.0	0.6
CaCO ₃ -calcite	1.0	0.0	3.0	0.0	1.0	0.0	3.0	0.6
ProOsteon 200R-acidi	2.5	0.6	4.0	0.0	1.8	0.4	3.0	0.6
ProOsteon 200R-neutr	2.0	0.0	2.6	0.9	2.3	0.0	3.0	0.6
Ostite C1	1.9	0.8	3.1	0.4	1.8	0.8	3.0	0.6
Ostite C2	2.1	0.8	2.9	0.3	2.1	0.8	3.0	0.6
Ostite C3	1.8	0.6	3.2	0.4	1.7	0.6	3.0	0.6
GB9N	1.0	0.0	2.5	0.6	1.2	0.0	3.0	0.6
Bioglass								

Figure 8 A

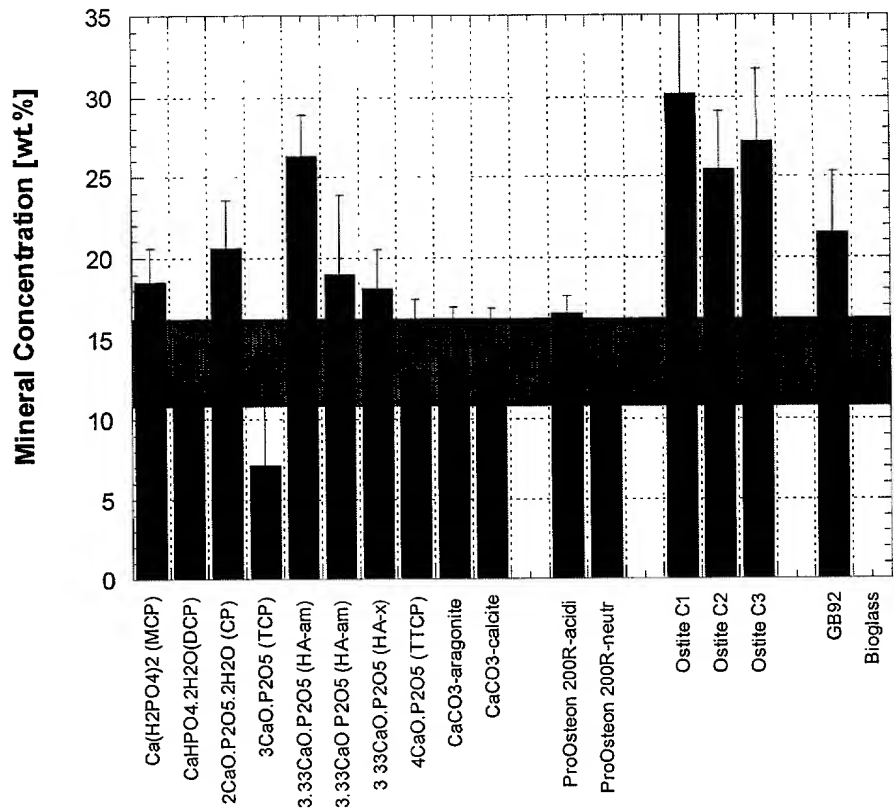


Figure 8 B

	Mineral Concentration				Mineral conc. - normalized			
	CPB		CDB		CPB		CDB	
	avg	±SD	avg	±SD	avg	±SD	avg	±SD
Ca(H ₂ PO ₄) ₂ (MCP)	18.0	2.0	13.1	1.8	18.5	2.1	13.5	2.7
CaHPO ₄ .2H ₂ O(DCP)	11.9	2.7	13.0	2.1	12.3	2.8	13.5	2.7
2CaO.P ₂ O ₅ .2H ₂ O (CP)	17.3	2.5	11.3	1.0	20.6	3.0	13.5	2.7
3CaO.P ₂ O ₅ (TCP)	7.6	7.0	14.4	1.8	7.1	6.6	13.5	2.7
3.33CaO.P ₂ O ₅ (HA-am)	24.6	2.4	12.6	2.1	26.3	2.6	13.5	2.7
3.33CaO.P ₂ O ₅ (HA-am)	18.3	4.7	13.0	1.4	19.0	4.9	13.5	2.7
3.33CaO.P ₂ O ₅ (HA-x)	18.9	2.5	14.1	2.6	18.1	2.4	13.5	2.7
4CaO.P ₂ O ₅ (TTCP)	13.1	4.4	13.6	2.1	13.0	4.4	13.5	2.7
CaCO ₃ -aragonite	14.5	3.3	14.2	4.0	13.8	3.1	13.5	2.7
CaCO ₃ -calcite	12.3	3.0	12.3	3.0	13.5	3.3	13.5	2.7
ProOsteon 200R-acidic	19.1	1.3	15.6	2.6	16.5	1.1	13.5	2.7
ProOsteon 200R-neutral	22.6	2.8	23.2	15.2	13.1	1.6	13.5	2.7
Ostite C1	22.2	5.4	9.9	2.1	30.2	7.3	13.5	2.7
Ostite C2	22.6	3.3	12.0	2.8	25.4	3.7	13.5	2.7
Ostite C3	23.2	3.8	11.5	2.8	27.2	4.5	13.5	2.7
GB9N	18.7	3.3	11.7	0.8	21.5	3.8	13.5	2.7
Bioglass								

Figure 9 A

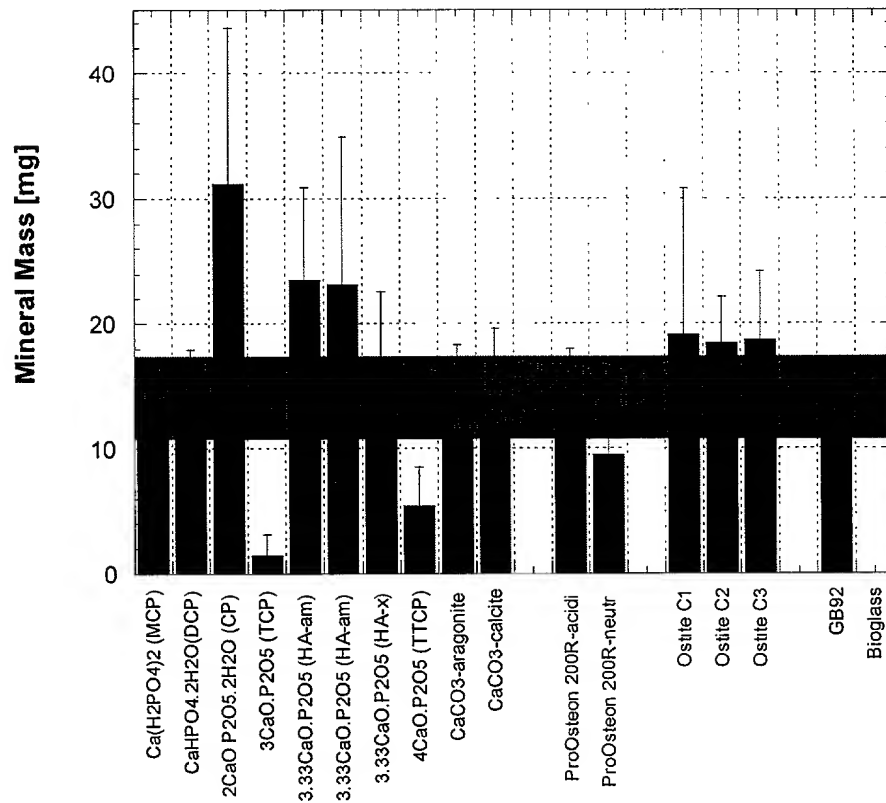


Figure 9 B

	Mineral Mass				Mineral Mass - <i>normalized</i>			
	CPB		CDB		CPB		CDB	
	avg	<i>±SD</i>	avg	<i>±SD</i>	avg	<i>±SD</i>	avg	<i>±SD</i>
Ca(H ₂ PO ₄) ₂ (MCP)	17.3	2.6	18.4	3.1	13.9	2.1	14.8	3.5
CaHPO ₄ .2H ₂ O(DCP)	9.4	2.2	9.6	3.2	14.5	3.4	14.8	3.5
2CaO.P ₂ O ₅ .2H ₂ O (CP)	13.3	5.3	6.3	1.1	31.2	12.4	14.8	3.5
3CaO.P ₂ O ₅ (TCP)	1.1	1.3	11.2	1.6	1.5	1.7	14.8	3.5
3.33CaO.P ₂ O ₅ (HA-am)	26.2	8.3	16.5	2.8	23.5	7.4	14.8	3.5
3.33CaO.P ₂ O ₅ (HA-am)	28.9	14.7	18.5	3.3	23.1	11.8	14.8	3.5
3.33CaO.P ₂ O ₅ (HA-x)	17.7	6.4	15.9	0.9	16.5	6.0	14.8	3.5
4CaO.P ₂ O ₅ (TTCP)	5.8	3.4	16.0	3.9	5.4	3.1	14.8	3.5
CaCO ₃ -aragonite	12.1	7.2	15.6	3.5	11.5	6.8	14.8	3.5
CaCO ₃ -calcite	14.2	9.2	17.7	8.5	11.9	7.7	14.8	3.5
ProOsteon 200R-acidi	14.7	4.3	15.6	7.0	13.9	4.1	14.8	3.5
ProOsteon 200R-neutr	5.9	1.6	9.2	4.4	9.5	2.6	14.8	3.5
Ostite C1	22.9	14.0	17.7	2.8	19.1	11.7	14.8	3.5
Ostite C2	17.3	3.5	13.9	3.4	18.4	3.7	14.8	3.5
Ostite C3	26.1	7.6	20.6	2.8	18.7	5.5	14.8	3.5
GB9N	10.9	4.9	14.0	2.8	11.5	5.2	14.8	3.5
Bioglass								

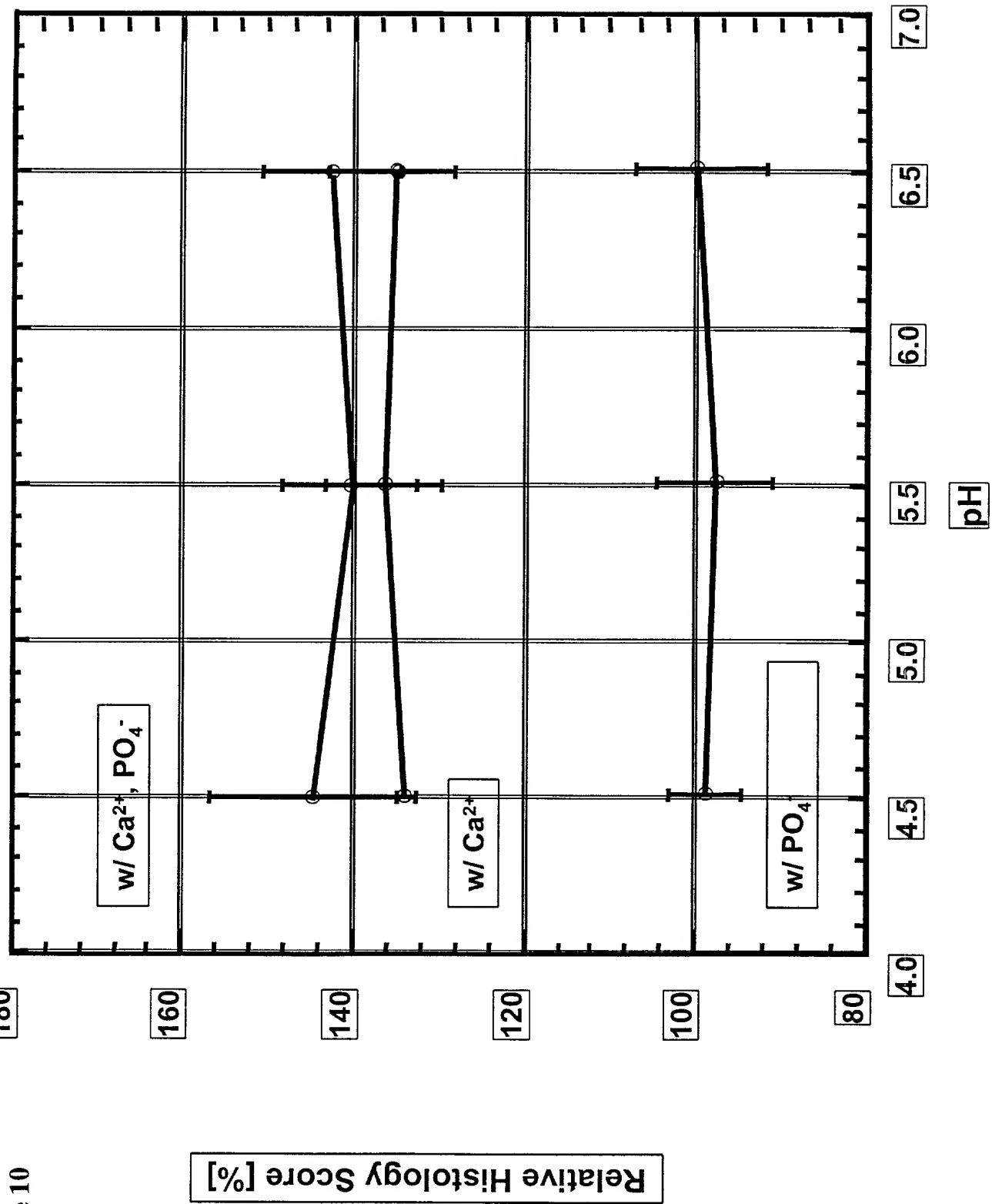


Figure 10

Figure 11

